

37

accessing information representative of activations of the heart while the heart experiences the complex rhythm disorder, the information being one or more of electrical, acoustic, electromagnetic, magnetic, microwave, and combinations thereof;

processing the information to identify a region of the heart including an activation pattern that is rotational or radially emanating, the activation pattern indicative of the source of the complex rhythm disorder, wherein the activation pattern is based on activations of the heart; and

generating a clinical representation of the activation pattern of activations that identifies the region of the heart associated with the indicated source.

67. The method of claim 66, wherein the method further comprises selecting a portion of the region of the heart based at least on the activation pattern to facilitate modification of the portion of the region for elimination of the activation pattern.

68. The method of claim 66, wherein the activation pattern comprises a rotor.

69. The method of claim 66, wherein processing the information to identify the region of the heart comprises arranging the activations to identify the activation pattern of the region.

70. The method of claim 69, wherein the activations are arranged in a sequence based on one or more of: timing of the activations, timing related to shapes of the information, spatial relationship of sensors related to the information, and phase of the information.

71. The method of claim 66, wherein the method further comprises identifying a core region around which the activation pattern rotates or from which the activation pattern radially emanates.

72. The method of claim 71, wherein the method further comprises selecting a portion of the core region to facilitate modification of the portion of the core region for elimination of the activation pattern.

73. The method of claim 66, wherein the activation pattern is repeating.

74. A method of analyzing a source of a complex rhythm disorder in a heart of a human, the method comprising:

38

accessing information representative of activations of the heart while the heart experiences the complex rhythm disorder;

identifying a region of the heart having activations that revolve around or radially emanate from a core region, wherein the region of the heart comprises the core region that is interior to an activation trail, and wherein a pattern of the activations is based on at least one of a phase method, time domain method and Hilbert transform, wherein the pattern of the activations is indicative of the source of the complex rhythm disorder; and

generating a clinical representation of the pattern of the activations that identifies the region of the heart associated with the indicated source.

75. The method of claim 74, wherein the pattern of the activations comprises a rotor.

76. The method of claim 74, wherein identifying the region of the heart comprises arranging activations associated with the activations to identify the pattern of the activations.

77. The method of claim 76, wherein the activations are arranged in a sequence based on one or more of: timing of the activations, timing related to shapes of the information, spatial relationship of sensors related to the information, and phase of the information.

78. The method of claim 74, wherein the method further comprises identifying a core region around which the pattern of activations rotates or from which the activation pattern radially emanates.

79. The method of claim 78, wherein the method further comprises selecting a portion of the core region to facilitate modification of the portion of the core region for elimination of the pattern of activations.

80. The method of claim 78, wherein the method further comprises selecting at least a portion of an area adjacent the core region to facilitate modification of at least the portion of the area adjacent the core region for isolation or migration of the activation pattern.

81. The method of claim 74, wherein the method further comprises generating a clinical representation of the pattern of activations.

\* \* \* \* \*